

RESPONSE TO COMMENTS
BP EXPLORATION (ALASKA) – LISBURNE PRODUCTION CENTER
MINOR PERMIT AQ0272MSS01
Final – January 16, 2007

BP Exploration (Alaska) requested a minor permit to operate emergency generators for a pipeline replacement project between L1 pad and the Lisburne Production Center. The Operating Permit AQ0272TVP01 limits the intended temporary generators to no more than 140 hours of operation per rolling 12-month period. BP Exploration (Alaska) has requested that this condition be temporarily rescinded for the period of the project.

ADEC received comments on the minor permit from the Permittee

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This document contains ADEC's responses (shown in ***bold italics***) to comments on the proposed permit as sent for public notice.

COMMENTS ON MINOR PERMIT AQ0272MSS01 AND ADEC RESPONSES

Comment #1 Title Page – Change name from Temporary Power Provisions to Temporary Power Provisions for Replacement of the L1 to LPC Pipeline
The Department agrees with this change and has updated the permit and the TAR to reflect this.

Comment #2 On the title page change Location of CFP to Location of LPC
The Department agrees with the change and has updated the permit to reflect this.

Comment #3 On the title page add Expires: May 31, 2007 under the date heading
The Department agrees with the change and has updated the permit to reflect this.

Comment #4 Change Table 1 Source Tag No. for ID 44 from TBD to 80-858
The Department agrees with the change and has updated the permit to reflect this.

Comment #5 Change Table 1 Rating/Size for ID 44 from TBD to 890 hp [600 kW-e]
The Department agrees with the change and has updated the permit to reflect this.

Comment #6 Change Table 1 Source Description for ID 44 from Backup Diesel Generator Pt. McIntyre Drill Site 2 to Temporary Backup Diesel Generator Pt. McIntyre Drill Site 2.

The Department agrees with the change and has updated the permit to reflect this.

Comment #7 Change Table 1 Source Tag No. for ID 45 from TBD to NA

The Department agrees with the change and has updated the permit to reflect this.

Comment #8 Change Table 1 Rating/Size for ID 45 from TBD to 2850 hp [2000 kW-e]

The Department agrees with the change and has updated the permit to reflect this.

Comment #9 Change Table 1 Source Description for ID 45 from Diesel Replacement Generator Pt. McIntyre Drill Site 2 to Temporary Diesel Replacement Generator Pt. McIntyre Drill Site 2

The Department agrees with the change and has updated the permit to reflect this.

Comment #10 Change Table 2 Source Tag Number for ID 30 from 80-891 (PM1-EDE5) to 80-892 (PM2-EDE5)

The Department agrees with the change and has updated the permit to reflect this.

Comment #11 In Condition 3 remove Backup Generator Emission Unit 44 as BPXA States “[Emission Unit 44 is a TEMPORARY backup unit that will not replace the existing unit. It will be used only during the life of the project to provide backup or supplemental power to the project if necessary due to failure of the existing unit or to temporarily provide additional power. In other words, it will augment the available power from the other units and it WILL NOT be used to replace the existing units. The temporary unit has historically been classified as a nonroad engine used to provide temporary power at various locations within the Greater Prudhoe Bay area. As a nonroad engine, it is NOT subject to the limits found in 18 AAC 50.055(a), (b), or (c). The nonroad status of this engine will not change as a result of its use for this project. BPXA will remove this engine from the PM2 pad at the conclusion of this project in order to maintain its nonroad engine status. The Department may add a condition to this permit to make this an enforceable requirement, if so desired. Remaining comments to the permit on this issue are based on our assumption that Unit 44 is classified as a nonroad engine.]”

NOTE: if there is still some uncertainty on ADEC’s part regarding the nonroad status of Unit 44, then BPXA will accept ADEC’s alternate plan to allow use of Unit 44 up to a certain number of hours before a source test is required. However, if this approach must be taken, we propose that instead of triggering a source test requirement based on the number of hours operated, a testing requirement be triggered when estimated NOx emissions from this unit exceed 2 tpy (the NOx emissions threshold at which point emissions from the unit become “significant” as defined under 18 AAC 50.326(e)).]”

The Department in reviewing this looked at whether emission unit 44 was replacing the turbines that normally supplied power to the pad, or it was replacing the emergency generators that normally supplied emergency backup power only. It was the Department's determination that Emission Unit 44 is temporarily augmenting and backing up emergency generators 29 and 30 and is not intended to replace them or to supply power as a replacement to either Emission Unit 29 or 30 except on an emergency basis. The Department agrees that Emission Unit 44 is a non-road engine and has updated the permit to reflect this.

Comment #12 Modify Condition 3.1 to change the word begin to begins, change perform 40 CFR 60 to perform a 40 CFR 60, and remove an extra space from in front of start.

The Department agrees with these changes and has updated the permit to reflect this.

Comment #13 If Emission Unit 44 is considered a "non-road engine" update all relevant permit conditions, where reference to Emission Unit 44 is no longer required, to remove backup generator Emission Unit 44.

The Department agrees with the change and has propagated this change to all applicable locations in the permit to reflect this change since the Department has accepted that Emission Unit ID 44 will be considered a non road engine.

Comment #14 Delete Condition 4.1

The Department agrees with the change and has updated the permit to reflect this, as this related to an initial compliance test for Emission Unit ID 44, which has been considered a non road engine and not subject to the state emission standards as indicated in the Clean Air Act.

Comment #15 Modify Condition 5 to correct grammar.

The Department agrees with the change and has corrected the grammar in Condition 5 of the permit to reflect this.

Comment #16 Modify Condition 5.1 a. to remove the word "facility" from in front of operating permit.

The Department agrees with the change and feels that it better represents the intent of Condition 5.1 and has updated the permit.

Comment #17 Modify Condition 5.1 d. to remove the word "facility" from in front of operating report.

The Department agrees with the change and feels that it better represents the intent of Condition 5.1 d. and has updated the permit.

Comment #18 Modify Condition 6 to add "while Emission Unit 29 is operating"

The Department has reviewed the ambient modeling assessment and agrees that this change will not contribute to an ambient air quality violation and has updated the permit to reflect this.

Comment #19 Modify Condition 8 to add “counter” in front of clockwise and correct spelling of indefinitely.

The Department agrees with the change, as counter was inadvertently left out in the permit as submitted for public review and has updated the permit to reflect the correct orientation change required for the emission unit.

Comment #20 Modify Condition 12 to add “of the project” after “During the estimated eight week period”

The Department agrees that this change adds clarity to the intent of this condition.

Comment #21 Modify all conditions, where applicable, to add “temporary” in front of “backup generator Emission Unit 44”

The Department agrees that adding the word temporary adds additional clarity and has updated the permit.

Comment #22 Modify Condition 13.2 to read “The Permittee shall not operate replacement generator Emission Unit 45 simultaneously with emergency generator Emission Unit 30, except during a transition period not to exceed 3 hours when switching power from/to Emission Unit 45 to/from Emission Unit 30.”

The Department agrees with the change as there needs to be some overlap time to allow load shifting so there will not be an interruption to the power and heat at the facilities these generators are serving, and has updated the permit to reflect this.

Comment #23 Insert new Condition 13.3 to read “The Permittee shall keep a log of all hours of simultaneous operation of Emission Units 30 and 45.”

The Department agrees that this change adds an additional level of required monitoring recordkeeping and reporting with the change to allow the temporary simultaneous operation of Emission Unit ID’s 30 and 45. The Department has updated the permit to reflect this important addition.

Comment #24 Delete Condition 14, 14 a. and 14 b.

The Department does not concur with this change. To avoid the requirement to modify the Title V permit prior to commencing the pipeline replacement project, Condition 502(b)(10) of the Clean Air Act requires that there are no changes in the monitoring, recordkeeping and reporting requirements contained in the current Title V permit. The department wants to assure that this is being accomplished for the currently permitted units, under Operating Permit No. 272TVP01, and has thus made it a condition in the Title I permit. The Department has modified the language contained in the permit as sent for public review, to remove all language referring to Emission Units 44 and 45 and simplifying the language to show that the condition is for Emission Units 29 and 30.

Comment #25 Modify Condition 15 from total net NO_x to total project NO_x, remove per year (TPY). [The allowable PROJECT emissions increase is 41.4 tons based on the baseline NO_x emissions of 2.4 tons and ADEC's allowed net increase of 39 tons. This condition should be revised as indicated in the first line above to reflect this important difference.]

The Department changed this condition to state that the Permittee shall monitor for a full twelve-months after the project end date so cumulative emissions, from Emission Unit ID's 29, 30 and 45, do not exceed 41.4 tons for a rolling twelve-month period.

Comment #26 Regarding ADEC's two tier approach regarding emission calculations. BPXA states "BPXA is concerned that ADEC is proposing to set a precedent with respect to the use of vendor guaranteed emission factors for estimating emissions that is unreasonable.

In reviewing past decisions for NO_x PSD avoidance under the new permitting program and recent Construction Permit revisions, the Department found one permit, 231CP03, that has vendor guaranteed data specifically called out. This Permit has a NO_x limit of 240 tpy. However the permit has a requirement to perform source testing at 235 ton of NO_x, and if the source test is not accomplished then the Permittee is limited to 235 tpy. Therefore, the current decision not to allow emissions right up to the PSD threshold based on guaranteed data is not a new precedent.

Vendors are willing to guarantee emissions only when they are very comfortable that emissions from a guaranteed unit will be less than the stated guaranteed emission rate by pollutant. It is, therefore, expected with a high level of confidence by the vendor that guaranteed emissions are higher than the emission rate that would be measured by a source test.

...it does not make sense to limit emissions from an engine when using vendor guaranteed emission rates to a value that is less than the acceptable value based on emissions estimates from source tests.

Furthermore, what incentive would a permittee have to estimate emissions using the much more conservative vendor guaranteed emission factors compared to the unguaranteed emission factors if each estimation method is considered equally valid?

To secure PSD avoidance for this project, the Department is taking into account uncertainty in the emissions calculations for permitted emission units. The Department gives similar weighting to emission factors from source tests at maximum operating rates, and from guaranteed data. We do not credit either with a confidence up to three significant digits.

Furthermore, it is common practice to use vendor guaranteed emission rates to determine permit applicability when comparing to emission thresholds that trigger PSD permitting. When emission guarantees are used, a permittee is typically allowed to go right up to an emissions threshold before triggering a PSD permitting requirement. If this project were associated with a new stationary source, instead of an existing stationary source, we would expect to trigger PSD permitting requirements if emissions estimated using vendor guaranteed emissions were at or above 250 tons for any criteria pollutant, not 90% of 250 tons (225 tons). We believe the same consideration should be given for this project.

The Department in its research of past PSD avoidance permits for NO_x that have been issued under the current program and none of the permits have shown that any permittee has been allowed to go right up to the PSD NO_x limit. The Department has reviewed past precedents in making its decision and in determining the allowed PSD avoidance margin, and feels it is in compliance with past precedent, and has allowed the Permittee to go to 39 tons (or 97.5% of the PSD limit) of NO_x instead of 36 tons (or 90% of the PSD limit) due to the short term nature of the project and the use of guaranteed emission factors or source testing emission factors.

As such, we believe that 1) the allowed PROJECT emissions increase should be 42.3 tons of NO_x (a 39.9 ton NET emissions increase) and that if BPXA uses vendor guaranteed emission factors, no adjustment should be required; 2) that a source test value require an adjustment that results in an equivalent 39 ton NET emissions increase (1.025), and; 3) that an adjustment of 1.1 be used, as proposed by ADEC, if an AP-42 emission factor is used. The following comment is based on this request.

We propose that ADEC delete conditions 15.1 through 15.3, and replace them with the following condition –

- 15.1 The Permittee shall adjust emissions estimates for Emission Units 29, 30, 44, or 45, when evaluating compliance with the limit in condition 15, as follows:
- a. When using engine model-specific vendor guaranteed emission factors to estimate emissions, no adjustment is necessary;
 - b. When using Department approved source test results to estimate emissions, multiply the calculated emissions by 1.025;
 - c. When using AP-42 or unguaranteed emissions factors to estimate emissions, multiply the calculated emissions by 1.1.]

The Department agrees with the general approach. A two tier approach is consistent with past precedents, and for this project the Department will allow source testing the individual unit at maximum load and vendor guaranteed emission factors, which are intended to take the variability out of the emission

factors, to have the same weighting in determining the maximum NO_x limit for PSD avoidance.

Unguaranteed factors and AP-42 have significant uncertainty associated with them for any given engine being operated, and the 10% factor being applied to the emission calculations is small and appropriate as it is consistent with the Departments findings on past precedents using these emission factors.

The Department would allow the Permittee to closely approach the PSD threshold by allowing the Permittee to go to 39.9 tons of NO_x for this project if continuous monitoring of emissions is performed on these units for the duration of the project and continued for the rolling twelve-month period that will be needed to ensure PSD avoidance. We understand that BPXA is not considering this option for this project, and have, therefore not included CEMS in the permit. The continuous emissions data will take out the variability over time which could be due to differences in engine tuning or condition.

It is the Departments finding that we will make source testing and Vendor guaranteed emission factors not require a factor applied to the emissions calculated, and vendor unguaranteed and AP-42 to have a 10% factor applied. The Department has updated the permit to reflect this change and will not incorporate the requested changes to 15.1 (a), (b), (c) as listed above.

Comment #27 Modify Condition 15.1, 15.1 a., and 15.1 b. as follows:

15.1 If the Permittee is operating either emergency generator Emission Unit 29 or emergency generator Emission Unit 30:

- a. If a source test has not been successfully performed, and the Permittee is using either guaranteed or unguaranteed vendor emission unit specific emissions factors or AP-42 emission factors on Emission Units 29 and 30, then all emissions calculated during operation of these units must be multiplied by 1.1 for evaluating compliance with the emission limit in condition 15.
- b. Upon Department approval of source testing results for either emergency generator Emission Unit 29 or emergency generator Emission Unit 30 and revised emission factors are achieved, the Permittee may be authorized to eliminate the requirement for multiplying the emissions calculations by 1.1, and then may multiply the calculated emissions by 1 to evaluate compliance with the emission limit in condition 15.

The Department has modified Conditions 15.1 to reflect that if Emission Units 29 and 30 are using unguaranteed vendor emission factors or AP-42 emission factors they are subject to a 10% factor applied to all the emission calculations. If Emission Units 29 and 30 are using vendor guaranteed emission factors or

emission factors from source testing then there is no factor applied to the emissions calculated.

Comment #28 Modify Condition 15.2, 15.2 a., and 15.2 b. as follows:

15.2 If the Permittee is operating emergency generator Emission Unit 45:

- a If a source test has not been successfully performed, and the Permittee is using either guaranteed or unguaranteed vendor emission unit specific emissions factors or AP-42 emission factors on Emission Unit 45, then all emissions calculated during operation of this unit must be multiplied by 1.1 for evaluating compliance with the emission limit in condition 15.
- b Upon Department approval of source testing results and revised emission factors for Emission Unit 45, the Permittee may be authorized to eliminate the requirement for multiplying the emissions calculations by 1.1, and then may multiply the calculated emissions by 1 to evaluate compliance with the emission limit in condition 15.

The Department has modified Conditions 15.1 to reflect that if Emission Unit 45 is using unguaranteed vendor emission factors or AP-42 emission factors it is subject to a 10% factor applied to all the emission calculations. If Emission Unit 45 is using vendor guaranteed emission factors or emission factors from source testing then there is no factor applied to the emissions calculated.

Comment #29 Modify Condition 15.3, 15.3 a., and 15.3 b. as follows:

15.3 If the Permittee is operating emergency generator Emission Unit 44:

- a If a source test has not been successfully performed, and the Permittee is using either guaranteed or unguaranteed vendor emission unit specific emissions factors or AP-42 emission factors on Emission Unit 44, then all emissions calculated during operation of this unit must be multiplied by 1.1 for evaluating compliance with the emission limit in condition 15.
- b Upon Department approval of source testing results and revised emission factors are achieved, the Permittee may be authorized to eliminate the requirement for multiplying the emissions calculations by 1.1, and then may multiply the calculated emissions by 1 to evaluate compliance with the emission limit in condition 15.

The Department has removed this condition as Emission Unit 44 is a non road engine and there is not a need to calculate its emissions as its emissions do not count towards the projects emissions.

Comment #30 Modify Condition 17.1 to correct a spelling error

The Department corrected the spelling error and has updated the permit to reflect this.

Comment #31 Modify Condition 17.3 as follows:

17.3 The Permittee shall calculate emissions on a daily basis or after each fuel delivery is received during the pipeline replacement period.

The Department agrees that this change adds additional clarity and has updated the permit.

Comment #32 Create Condition 17.4 to state the following:

17.4 Include in the report required under condition 29 the total emissions determined in condition 16.2.

The Department agrees that this condition is required to ensure reporting of the emissions from the project and has updated the permit to reflect this however the Department has made a minor change and will add "operating" in front of report.

Comment #33 Modify Condition 18 as follows:

18. The Permittee shall record the start date of the pipeline replacement period and provide written notice to the Department at least ten days prior to the start date listing the date and the project description. The Permittee may provide written notice as described in this condition prior to permit issuance.

The Department agrees with the change so there is not a built in 10 day waiting period after the permit is issued until the Permittee can operate and start the project and the Department has updated the permit.

Comment #34 Modify condition 19 as follows, and review it for necessity and delete it if possible.

19. The Permittee shall notify the Department in writing within ten days of completing the pipeline replacement project.

The Department is still requesting notification of the completion of the project period, and has changed the condition to 10 days after the completion of the project period.

Comment #35 Modify Condition 20.1 as follows

20.1 Each emergency generator shall have a dedicated fuel tank. Fuel consumption shall be measured by monitoring each fuel delivery with custody transfer quality measurement methods.

The Department agrees with the proposed clarification and has updated the permit.

Comment #36 Modify Condition 20.2 as follows:

20.2 The fuel delivery period shall start with full fuel tanks and then monitoring all fuel deliveries for the duration of the project, including a final delivery to fill all dedicated fuel tanks at the conclusion of the project to get total fuel delivered.

Additional discussion from BPXA: [Proposed method of monitoring fuel consumption is not achievable in any practical way. Tanks cannot reasonably be made empty to start, and emptying tanks would be an unnecessary burden and risk from a spill and engine availability standpoint. The desired result can be more easily achieved if the project begins and ends with full fuel tanks.]

The Department agrees that the Permittee may start the project with full tanks as it is not feasible to start with empty tanks after discussion about what would be required. The Department will make the necessary change to the permit.

Comment #37 Delete Condition 20.4 as fuel delivery measurements should begin with full tanks, not empty.

The Department does agree with changing to starting with full tanks and has updated the permit to reflect this, however 20.4 has been modified to give the Permittee the option not to refill the tanks at the end of the project and to use the full tank volume as being fully used to calculate emissions.

Comment #38 Modify Condition 24 as follows:

24. At the completion of the project or May 31, 2007, whichever occurs first, Emissions Units 29 and 30 will be subject to condition 10 of Operating Permit 272TVP01 and further operation of Emissions Units 44 and 45 is not allowed under this permit. The operating time accumulated during the period of this permit will not be counted towards the 140 hour per rolling 12-month period, maximum hours of operation for Emissions Units 29 and 30.

The Department agrees that adding further clarification to state that further operation of Emission Units 44 and 45 adds value to this condition and has updated the permit with this required clarification.

Comment #39 Modify Condition 30 as follows:

30. **Operating Reports.** During the life of this permit, the Permittee shall submit to the Department an original and two copies of an operating report by July 31, 2007 for the period of the construction. This does not replace the requirements of operating report requirements under Title V permit 272TVP01.

Additional discussion from BPXA [BPXA requests that the timing for submittal of this operating report match the timing of the routine operating reports submitted for the Lisburne Production Center.]

The Department agrees in principal with this change, however for consistency Title V permit will be replaced with Operating Permit.

Comment #40 Include attachment called out in Condition 33.1

The Department has included the Visible Emissions Form and the ADEC Notification Form attachments that were left out of the public notice draft permit.

Comment #41 Correct spelling error in permit documentation

The Department has corrected the spelling error.

Comment #42 Modify October 24, 2006 line item in Permit Documentation as follows:

BPXA Air Quality Control Minor Permit Application Received (application dated October 17, 2006)

The Department agrees that the application was received on October 24, 2006; however, it was dated October 17, 2006.

COMMENTS ON TECHNICAL ANALYSIS REPORT AQ0272MSS01 AND ADEC RESPONSES

Comment #1 In the Abbreviations/Acronyms page, for gr/dscf change feet to foot.
The Department agrees that this change creates the desired affect.

Comment #2 In the Background add Stationary Source Description and change Facility to Stationary Source.

The Department agrees that this change is needed for clarity and has updated the TAR.

Comment #3 In the Project Description add the word temporary in front of emergency backup generator located at PM2. Add the following sentence "The inventory of emission units that may be used under permit no. AQ0272MSS01 for the project is provided in Table 1."

The Department agrees that this adds additional clarity to the statement and the intent of the project description.

Comment #4 Update Table 1 of the TAR with the following Changes

- Change Table 1 Source Tag No. for ID 44 from TBD to 80-858
- Change Table 1 Rating/Size for ID 44 from TBD to 890 hp [600 kW-e]
- Change Table 1 Source Description for ID 44 from Backup Diesel Generator Pt. McIntyre Drill Site 2 to Temporary Backup Diesel Generator Pt. McIntyre Drill Site 2
- Change Table 1 Source Tag No. for ID 45 from TBD to NA
- Change Table 1 Rating/Size for ID 45 from TBD to 2850 hp [2000 kW-e]
- Change Table 1 Source Description for ID 45 from Diesel Replacement Generator Pt. McIntyre Drill Site 2 to Temporary Diesel Replacement Generator Pt. McIntyre Drill Site 2
- Change Table 2 Source Tag Number for ID 30 from 80-891 (PM1-EDE5) to 80-892 (PM2-EDE5)

The Department agrees that the new data provided in the public comment redline drafts should be incorporated in Table 1 and has updated Table 1 to reflect the changes.

Comment #5 Add “of AP-42” and add “potential” in their appropriate places in Project Emissions Summary.

The Department agrees that this adds clarity to the Project Emission Summary and has updated the TAR to reflect this.

Comment #6 Modify Table 2 as follows

Pollutant	Proposed Potential Emissions (TPY) ^a	Existing Potential Emissions (TPY)	PTE Increase (TPY)	Minor Permit Threshold (TPY)	Minor Permit Applicable?
NO _x	41.4	4.6	36.8	10	yes
CO	N/A	N/A	N/A	N/A	no
PM-10	1.29	0.14	1.15	10	no
SO ₂	2.27	0.20	2.07	10	no
VOC	N/A	N/A	N/A	N/A	no

Table 2 Notes:

^aProposed potential emissions based on an estimated 221,255 gallons of fuel consumed by the existing emergency generators units 29 and 30 at PM1 and PM2.

Additional Comment from BPXA [Update the proposed NO_x PTE to 42.3 tons and the other pollutant PTE values (based on 226,600 gallons of fuel) in Table 2 and Table 3 if ADEC grants our request to do so per our comment regarding the proposed NO_x PTE as given in condition 15 of the original public notice draft permit.]

The Department has updated the table to include the revised calculated emissions based on 221,255 cumulative gallons of fuel to be used for the project. For additional clarity columns for Existing Potential Emissions and PTE Increase were added. Comment ^a was also added to the table to clarify that the emissions are based on a cumulative 221,255 gallons of fuel to be used for the project.

Comment #7 Modify Table 3 as follows:

Pollutant	Proposed Potential Emission (TPY) ^a	Actual Emissions from Application (TPY)	Net Change (TPY)	PSD Major Modification Threshold (TPY)	PSD Applicable?
NO _x	41.4	2.4	39	40	no
CO	10.9	0.6	10.3	100	no
PM-10	1.29	0.08	1.21	15	no
SO ₂	2.27	0.08	2.19	40	no
VOC	1.16	0.07	1.09	40	no

Table 3 Notes:

^a Proposed potential emissions based on an estimated 221,255 gallons of fuel consumed by the existing emergency generators units 29 and 30 at PM1 and PM2.

The Department agrees with the change and has updated the TAR to reflect this. The modification to the table regards an update in emissions by calculating the emissions for the project based on 221,255 gallons of fuel to be used. Comment ^a was also added to the table to clarify that the emissions are based on a cumulative 221,255 gallons of fuel to be used for the project.

Comment #8 Modify Department Findings 2 by deleting “and this is” from between ORL and classified in the first sentence.

The Department agrees that this clarifies the intent of finding 2 and has updated the TAR.

Comment #9 Modify Department Findings 3 as follows:

3. Table 2 shows that the project will increase potential NOx emissions by 37 TPY which makes the project classified under 18 AAC 50.502(c)(3); as this project will exceed the NOx Minor Permit threshold of 10 TPY.

The Department agrees that the Minor Permit threshold review number for the project should have been 37 tons not 39 tons and has updated the TAR.

Comment #10 In Department Findings the Department should review the allowable NOx limit for the Permit and change to 39.9 as requested by BPXA.

The Department has researched the Title I permits issued since March 31, 2005 looking for examples of Title I permits that allow a Permittee to approach the PSD Major Modification and Major thresholds. The Department reviewed 9 permits that have NOx ORL PSD avoidance limits. Eight of the permits have ORL's that are less than the 97.5 % of limit that the Department is proposing for BP's short term pipeline replacement project. One permit allowed 98.4 % of the limit for PSD major avoidance, however it was rescinded and replaced by a NOx PSD avoidance limit that is 97.2 % of the threshold during a modification to the stationary source. The one permit that has vendor guaranteed data specifically called out, has a limit on NOx of 96% of the PSD limit, and a requirement to perform source testing at 90% of the PSD requirement. It is the Departments finding that the 97.5% of the PSD major modification limit is a generous limit for the short term project. The Department will modify the permit and TAR to allow the Permittee to use vendor guaranteed data and/or source testing to achieve the 97.5% of the PSD major modification limit, for this short term project. The configuration that is operating at the time of the surpassing of the 36 TPY limit must either have source testing or vendor guaranteed data to operate after the lower limit.

Comment #11 Modify Department Finding 5 to change the initial tank fill level prior to starting the pipeline replacement project as follows:

The Permittee shall accurately monitor and report the total cumulative fuel consumption for the project's emergency generators so accurate emissions calculations can be made. This shall be accomplished through accurate monitoring of the fuel deliveries. The Permittee must start the fuel delivery measurement period with full tanks and end the project with full tanks. As an alternative to filling the fuel tanks at the end of the project, the Permittee may assume that the entire tank of fuel has been consumed and the total tank volume amount may be used to calculate emissions.

The Department agrees that the project should begin with full tanks as the Permittee has stated that they cannot, in any practicle way begin the project with empty tanks and the TAR has been updated to reflect the intent of this change.

Comment #12 Modify Department Finding 6 as follows:

The Department has established factors for unguaranteed and AP-42 emissions factors, and for source test results to add a conservative margin to keep the emissions generated below the PSD major modification limit. Since the emission factors have some inherent error associated with them, the Department added a 10% factor to account for the maximum error possible for the AP-42 and unguaranteed vendor emission factors, which are nominal factors that may not necessarily represent the maximum engine emission rates. The Department also added a 2.5% factor for emissions estimated using source test results to account for inherent variations in emissions. The Department will allow the Permittee, to have the option, to remove the need to multiply their calculated emissions by a 1.1 or 1.025 factor, established in section 4 of the Minor Permit AQ0272MSS01, by using vendor guaranteed emission factors. The generator configuration that is operating must have successfully completed a source test to use the 1.025 factor. If the generator that is operating has not successfully completed a source test, it will be subject to the 1.1 factor if vendor guaranteed emissions specific to the engine model are not available. Since the existing generator engines at PM1 and PM2 are of identical make, model, and configuration, a source test on either of these engines may be used to estimate emissions from both engines.

The Department does not agree with the change and has updated the TAR with the following modification.

"The Department has established a factor for unguaranteed and AP-42 emissions factors, to add a conservative margin to keep the emissions generated below the PSD major modification limit. Since the emission factors have some inherent error associated with them, the Department added this 10% factor to account for the maximum error possible for the AP-42 or unguaranteed vendor emission factors which are nominal factors that may not necessarily represent the maximum engine emission rates. The Department will allow the Permittee, to have the option, to remove the need to multiply their calculated emissions by the 1.1 factor, established in section 4 of the Minor Permit AQ0272MSS01, by performing either a source test or using vendor guaranteed emission factors. If the generator configuration that is operating has not successfully completed a source test or is not using vendor guaranteed emission factors, it will be subject to the 1.1 factor. Since Emission Units

29 and 30 are of identical make, model and configuration a source test on either of the engines may be used to estimate emissions from both engines.”

Comment #13 Modify Department Finding 7 as follows:

The Department will allow the Permittee to replace Emissions Units IDs 29 and 30 with Emission Unit ID 45 or Emission Unit ID 45 with Emission Units IDs 29 and 30. The Permittee shall not operate Emission Unit ID 45 simultaneously with Emission Unit ID 30, except during a power transition period that cannot exceed 3 hours to shift operations from one configuration to another.

Additional Discussion from BPXA: **[See our comment in the permit about simultaneous operation of these units.]**

The Department agrees that there should be some allowance given for simultaneous operation with Emission Units 45 and 30 so the facility does not lose power while load switching and has updated the TAR to reflect this.

Comment #14 Modify Department Finding 8 as follows:

Minor Permit AQ0272MSS01 requires the Permittee to monitor, record, and report as described in Operating Permit No. 272TVP01, this is because the minor permit is contained under Clean Air Act section 502(b)(10), which requires that all Title V monitoring, recordkeeping and reporting be maintained.

The Department agrees that recordkeeping should have been in the place of a second reference to reporting and has updated the TAR.

Comment #15 Modify Department Finding 11 as follows:

Source testing may be accomplished per approved State and EPA approved methods in 18 AAC 50.220 to determine revised emissions factors. A test plan must be submitted and approved prior to commencing the testing. These emission factors, upon approval by the Department, shall be used to retroactively re-calculate the daily, monthly and project total net NO_x emissions for the emergency generators.

The Department agrees with the minor wording changes that add additional clarity to the finding and has updated the TAR with these changes.

Comment #16 Modify Department finding 12 as follows:

The Permittee has requested some self imposed limitations that the Department has included in the permit, these are; the construction permit is only valid during the period of the construction project, beginning with the anticipated construction start date and terminating no later than May 31, 2007. Drill rig operations at PM1 are not permitted for the full period of the construction. The trailer that houses emissions unit 29 at PM1 is to be rotated 90 degrees counterclockwise as shown in Figure 1 in Attachment A, and that

configuration must be maintained beyond the time of this permit. The Permittee must notify the Department in writing, no later than 10 days in advance of the anticipated date that construction will begin. Notification may be provided by the Permittee prior to issuance of the permit.

The Department agrees with the change that makes some minor wording changes to clarify the intent of the finding and allow the Permittee to submit the notification of the start date of the project as not to be automatically subject to a 10 day period after the issuance of the permit that they can not work due to the notification requirement. The TAR has been updated to reflect this minor but important change.

Comment #17 Modify 6.3 b. i as follows:

The replacement diesel fuel-fired generator (Unit 45) is subject to 18 AAC 50.055(a) for visible emissions. Because diesel-fired engines have the potential to exceed visible emissions standards, the Department is requiring the Permittee to verify compliance by conducting visible emissions surveillance within 30 days of startup of Emissions Unit 45. This may be accomplished with a single 40 CFR 60, Appendix A, Reference Method 9 observation.

The Department agrees that Emission Unit 44 is non road and not subject to this and has updated the TAR to reflect this.

Comment #18 Modify 6.3 b ii as follows:

The replacement diesel fuel-fired generator (Unit 45) is subject to 18 AAC 50.055(b) for PM emissions.

The Permittee provided a compliance demonstration using manufacturer's data for Emission Unit 45. The calculation was 0.01 grains per cubic foot (gr./dscf) and this is far below the established limit of 0.05 grains per cubic foot (gr./dscf).

The Department agrees that Emission Unit 44 is non road and not subject to this and has updated the TAR to reflect this.

Comment #19 Modify 6.3 b iii as follows:

The replacement diesel fuel-fired generator (Units 45) is subject to 18 AAC 50.055(c) for SO₂ emissions.

The Department has previously calculated that emission units burning distillate fuel with less than 0.75 percent sulfur by weight will comply with the state SO₂ emission standard of 500 ppm. Since the American Society of Testing and Materials (ASTM) limits fuel sulfur to less than 0.5 percent (by weight) for diesel fuel, the Department is not including any initial compliance requirements in the minor permit for the diesel-fired emission units. The Permittee may show compliance with the state sulfur standard for distillate fuel burning equipment by keeping records of the sulfur content of fuel consumed by Emission Unit 45.

The Department agrees that Emission Unit 44 is non road and not subject to this and has updated the TAR to reflect this.

Comment #20 Modify 6.4 as follows:

Section 4 of the minor permit contains conditions allowing the permittee to swap out the generators and modify the NO_x emission limit. The Department is temporarily rescinding Condition 10 for Emission Units IDs 29 and 30 which is a Title 1 condition contained in Operating Permit 272TVP01, for the Permittee's temporary construction project. The Permittee is avoiding PSD major modification classification for NO_x. This is being accomplished by limiting the total net project NO_x emissions increase for the pipeline replacement period for temporary emergency generators, IDs 29, 30 (as listed in Operating Permit 272TVP01), 44, and 45, to no greater than 39 (or 39.9) TPY. Emissions will be calculated for the emergency generators, IDs 29, 30 (as listed in Operating Permit 272TVP01), temporary unit 44, and replacement unit 45, by monitoring the total fuel deliveries, determining the fuel consumption for each unit, and multiplying this by an emissions factor in lb of emissions per gallon of fuel consumed. Depending upon the type of emission factor used to estimate emissions, the Permittee is required to adjust the emissions by either 10% (unguaranteed factors or AP-42) or 2.5% (source test results) if a factor other than an engine model-specific vendor guaranteed emission factor is used to estimate emissions. The Department is requiring the Permittee to calculate all emissions within 24 hours of receiving a fuel delivery. The Permittee shall use the emissions calculated to verify compliance to the emissions allowances.

Additional Comment from BPXA : [The draft permit does not revise the project emissions limit. The permit dictates how the emissions are to be scaled, which is described below.]

The Department does not agree with the requested change, and has modified 6.4 as follows.

"Section 4 of the minor permit contains conditions allowing the Permittee to swap out the generators and modify the NO_x emission limit. The Department is temporarily rescinding Condition 10 for Emission Units ID's 29 and 30 which is a Title I condition contained in Operating Permit 272TVP01, for the Permittee's temporary construction permit. The Permittee is avoiding PSD major modification classification for NO_x. This is being accomplished by limiting the total net project NO_x emissions increase for the pipeline replacement period for emergency generators, ID's 29, 30, 44, and 45, to no greater than 39 tons. Emissions will be calculated for the emergency generators, ID's 29, 30, temporary unit ID 44, and replacement unit ID 45, by monitoring total fuel deliveries, determining the total fuel consumption for each unit, and multiplying this by an emission factor in lb of emissions per gallon of fuel consumed. Depending upon the type of emissions factor used to estimate emissions, the Permittee shall be required to adjust the emissions by 10 percent for vendor unguaranteed or AP-42. The Department is requiring the Permittee to calculate emissions within 24 hours of receiving fuel delivery. The Permittee shall use the emissions calculated to verify compliance to the emission allowances."

Comment #21 Modify Permit Administration as follows:

changes that contravene an expressed permit term. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

40 C.F.R. 71.6(a)(13)(i) allows the [Title V] permittee to make section 502(b)(10) changes without a permit revision if the changes are not Title I modifications, *and the changes do not exceed emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions.)* For the purposes of changes to Title V permits, lacking EPA guidance to the contrary, the department considers Title I modifications to be PSD major modifications, and modifications under NSPS or under CAA Section 112. Therefore, this is not a Title I modification for this purpose. The department considers this to be a change that is allowed without a Title V revision because any existing permit limit that would be exceeded is not for allowable emissions expressed in the permit as a rate or total emissions.

The Department agrees with the minor wording changes to the routine condition as meets the intent of the condition and has updated the TAR to reflect this.

